REMARKS

Reconsideration and withdrawal of the rejections of the claims set forth in the Official Action of July 8, 2004, are respectfully requested in view of the following remarks.

Status of the Claims

Claims 1-19 are currently pending.

Claim 10 was rejected under 35 U.S.C. § 112, ¶ 2.

Claims 1-16 were rejected under 35 U.S.C. § 101.

Claims 1-4, 6-10 and 17 were rejected under 35 U.S.C. § 102(e).

Claims 5, 11-16, 18 and 19 were rejected under 35 U.S.C. § 103(a).

Rejections under 35 U.S.C. § 112

Claim 10 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner asserts that the phrase "those sources" renders the claims indefinite because this terminology seems to imply that "sources" have been previously claimed, thereby providing insufficient antecedent basis.

Applicant has made all of the foregoing suggested changes in claim 10. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112 is therefore respectfully requested.

Rejections under 35 U.S.C. § 101

In the Office Action, the Examiner rejected claims 1-16 under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. In particular, the Examiner points to a two pronged test which requires a determination of "(1) whether the invention is within the technological arts; and (2) whether the invention produces a useful, concrete, and tangible

result." (See Office Action, page 2, paragraph 5). The Examiner contends that "the claimed invention applies a projection factor to determine an estimate of total sales, therefore producing a useful, concrete, and tangible result, but not within the technological arts," but does not cite any legal authority for such proposition. (See *id.*, page 3, lines 14-18).

Applicants respectfully traverse the Examiner's rejection under 35 U.S.C. § 101 of claims 1-16, and submit that the Examiner is misconstruing Applicants' claims, as well as failing to apply the appropriate standards for patentability under 35 U.S.C. § 101 (as directed by the United States Court of Appeals, Federal Circuit). The Examiner is reminded that the correct standard to apply for rejecting the claims of this application under 35 U.S.C. § 101 has been set forth in by the court in the *State Street* case. *See State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373 (Fed.Cir. 1998) (referring to *In re Freeman*, 574 F.2d 1237 (CCPA 1978), *In re Walter*, 618 F.2d 758 (CCPA 1980), *In re Abele*, 684 F.2d 902 (CCPA 1982)).

It has been held that "[u]npatentable mathematical algorithms are identified by showing they are merely abstract ideas constituting disembodied concepts or truths that are not 'useful.' " *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373. In particular, the court held that in order to comply with the requirements of 35 U.S.C. §101, the claimed invention must produce "a useful, concrete and tangible result." *Id.* at 1373.

Applying this test to independent claims 1, 7 and 12 of the above-identified application, Applicants assert that each of these independent claims, and the claims which depend therefrom, comply with the requirements of 35 U.S.C. § 101 by providing **a useful, concrete and tangible result**. By the Examiner's own statement, the subject matter claimed

in claims 1-16 produces "a useful, concrete, and tangible result." (See Office Action, page 3, lines 14-18). In particular, independent claims 1 recites, *inter alia*, applying the projection factor to the sales data from the current sub-period of interest to determine an estimate of total sales for the current sub-period. Independant claims 7 and 12 include similar recitations. The transformation of data in claims 1, 7, and 12 through a series of mathematical computations advance the technological arts, namely a *machine*, by focusing particularly on the essential *characteristics* of the subject matter of the claims, *i.e.*, the practical utility of estimating total sales volume. This practical application of mathematical calculations by a machine falls within the bounds of a "new and useful machine" as defined under 35 U.S.C. § 101, and therefore is directed towards statutorily acceptable subject matter. The fact that Applicant's claimed invention may be performed by any number of processing arrangements in no way means that claims 1, 7 and 12 only recite "abstract ideas constituting disembodied concepts or truths that are not 'useful.' " *State Street* at 1373. Indeed, these claims do not merely recite "ideas in the abstract," (see Office Action, page 3, lines 2-6) but instead explicitly claim a series of functions for estimating sales volume. Accordingly, it is abundantly clear that while the claimed inventions may cover, e.g., a computer program, logic/software arrangements, and the like, each clearly produces "as a whole, a tangible, useful ... result," e.g., applying the projection factor to the sales data from the current sub-period of interest to determine an estimate of total sales for the current sub-period. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1361 (Fed. Cir. 1999).

Thus, for at least the reasons presented above, the Examiner's rejection of claims 1-16 under 35 U.S.C. § 101 should be withdrawn.

Rejections under 35 U.S.C. § 102

Claims 1-4, 6-10 and 17 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,032,125 to Ando ("Ando"). Applicant respectfully traverses these rejections and requests reconsideration and withdrawal of this rejection based on the following remarks.

As to claim 1, the claimed invention concerns a method for estimating sales volume of an item. The estimated total sales volume for the item is determined by calculating a sub-period specific projection factor for the corresponding sub-period, and applying the projection factor to the sales data from the current sub-period.

Ando is directed to a method for forecasting the demand for products based on fluctuation trends of past sales. Ando discloses reading the forecast result from a plurality of sub-periods sequentially, obtaining a forecast value by each sub-period pattern by comparing the forecast with the actual sales results for each sub-period, and the most frequently appeared pattern in the forecasting in the past 18 weeks is picked up *as the present* pattern of the future 18 weeks. (col. 5, lines 39-55). Ando discloses only looking to past patterns in sales forecasting to forecast future demand, and does not utilize this pattern with current sub-period sales data. Ando, does not disclose calculating a specific projection factor and *applying* the projection factor to sales data from the *current* sub-period of interest, as recited in claim 1 of the instant application. In view of the complete absence of this claim limitation in Ando, and the fact that the Ando does not disclose each and every element of claim 1, there can be no anticipation of the claimed invention by Ando. Accordingly, the rejection under 35 U.S.C. § 102(e) should be withdrawn and claim 1 should be allowed.

Claims 2-4 and 6 depend from claim 1, and should be patentable for at least those reasons recited above. Thus, the rejection of claims 1-4 and 6 under 35 U.S.C. § 102(e) should also be withdrawn.

As to claim 7, the claimed invention estimates daily sales volume, at least in part, by calculating a day of the week specific projection factor based on reference sales history data, sampling sales data for a current day of interest, and scaling at least a portion of the sampled sales data for the current day of interest by the day of the week specific projection factor. Ando does not disclose *scaling* at least a portion of the sampled sales data for the *current* day of interest by the day of week specific projection factor to determine an estimate of daily sales volume for the current day of interest, as recited in claim 7 of the instant application. In view of the complete absence of this claim limitation in Ando, and the fact that the Ando does not disclose each and every element of claim 7, there can be no anticipation of the claimed invention by Ando. Accordingly, the rejection under 35 U.S.C. § 102(e) should be withdrawn and claim 7 should be allowed.

Claims 8-10 depend from claim 7 and should be patentable for at least those reasons recited above. Thus, the rejection to claims 7-10 under 35 U.S.C. § 102(e) should also be withdrawn.

Claim 17 is the system claim corresponding to the method of claim 1. The remarks relating to claim 1, set out above, are equally applicable to claim 17, and thus the rejection to claim 17 under 35 U.S.C. § 102(e) should likewise be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 5 and 11 were rejected under 35 U.S.C. § 103(a) as being obvious in light of Ando in view of U.S. Patent No. 5,420,786 to Felthauser et al. ("Felthauser"). Claims 12-14

and 18 were rejected under 35 U.S.C. § 103(a) as being obvious in light of Ando, in view of U.S. Patent No. 6,021,394 to Takahashi ("Takahashi"). Claims 15, 16 and 19 were rejected under 35 U.S.C. § 103(a) as being obvious in light of Ando, in view of Takahashi, in further view of Felthauser. Applicant traverses these rejections at least for the reasons provided herein below. Reconsideration and withdrawal of these rejections are respectfully requested based on the following remarks.

According to the Federal Circuit, "[a] patented design must meet the substantive criteria of patentability, including non-obviousness in accordance with the law of 35 U.S.C. § 103." L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117 (Fed.Cir. 1993), cert. denied, 510 U.S. 908 (1993). The claimed design is patentable if "there is no teaching or suggestion in the prior art of the appearance of the claimed design as a whole." Id. In analyzing whether a design is patentable, the Examiner must not allow hindsight to influence this determination. Id., Decade Industries v. Wood Technology, Inc., 100 F.Supp.2d 979, 981 (D. Minn 2000), In re Klein, 987 F.2d 1569, 1573 (Fed. Cir. 1993).

Applicants respectfully traverse the rejection of claim 5 for the reasons set forth below and request reconsideration of this claim. Claim 5 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando, in view of Felthauser. Ando does not disclose *scaling* at least a portion of the sampled sales data for the current day of interest by the day of week specific projection factor to determine an estimate of daily sales volume for the current day of interest, as recited by claim 1 from which claim 5 depends. Felthauser does not cure the deficiencies of Ando. Thus, claim 5 is not rendered obvious by the combination of Ando and Felthauser for at least those reasons recited above in connection with claim 1 and this rejection should be withdrawn.

As to claim 11, Applicant respectfully traverses the rejection of claim 11 and requests reconsideration of this claim. Claim 11 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando, in view of Felthauser. As noted above, Ando does not disclose *scaling* at least a portion of the sampled sales data for the *current* day of interest by the day of week specific projection factor to determine an estimate of daily sales volume for the current day of interest, as recited in claim 7 of the instant application from which claim 11 depends. Felthauser does not cure the deficiencies of Ando. Thus, claim 11 is not rendered obvious by the combination of Ando and Felthauser for at least those reasons recited above in connection with claim 7 and this rejection should be withdrawn.

Applicant respectfully traverses the rejection of claim 12 and requests reconsideration of this claim. Claim 12 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Takahashi. The invention claimed by claim 12 requires, *inter alia*, collecting sampled sales data from a first plurality of sources for a current day of interest, collecting sampled sales data for a reference week from a second plurality of sources, calculating a day of the week specific projection factor for the current day of interest, and applying the projection factor to the sales data for the current day of interest. Ando does not teach or suggest calculating a day of the week specific projection factor for the current day of interest, and applying the projection factor to the sales data for the current day of interest.

Takahashi discloses estimating sales for a plurality of automatic vending machines, where sales related information is collected at various frequencies from a plurality of automatic vending machines. (col. 4, lines 30-35; col. 5, lines 21-26). For a particular automatic vending machine, the sales estimates are based only on past sales results collected *from the* automatic vending machine (col. 4, lines 55-60), and estimates sales *for a* plurality

of vending machines for a particular day of the week. (col. 5, lines 20-25). Takahashi does not cure the deficiencies of Ando. As such, Ando, alone or in combination with Takahashi, does not teach or suggest the subject matter of claim 12 and is not rendered obvious in light of the alleged combination and this rejection should be withdrawn.

Claims 13-14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Takahashi. Claims 13-14 depend from claim 12 and are patentable for at least those reasons recited above. Thus, the rejection to claims 12-14 under 35 U.S.C. § 103(a) should be withdrawn.

Applicant respectfully traverses the rejection of claim 18 and requests reconsideration of this claim. Claim 18 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Takahashi. However, Ando does not disclose calculating a specific projection factor and *applying* the projection factor to sales data from the *current* sub-period of interest, as recited in claim 17 of the instant application from which cliam 18 depends. Takahashi does not cure the deficiencies of Ando. As such, Ando, alone or in combination with Takahashi, does not teach or suggest the subject matter of claim 18 and is not rendered obvious in light of the alleged combination and this rejection should be withdrawn.

As to claims 15 and 16, Applicant respectfully traverses the rejection and requests reconsideration of this claim. Claims 15 and 16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Takahashi and Felthauser. Ando does not teach or suggest calculating a day of the week specific projection factor for the current day of interest, and applying the projection factor to the sales data for the current day of interest as claimed by claim 12 from which claims 15 and 16 depend. Neither Takahashi nor Felthauser cure the deficiencies of Ando. As such, Ando, alone or in combination with Takahashi and

Felthauser, does not teach or suggest the subject matter of claims 15 and 16 and the claims are not rendered obvious in light of the alleged combination and this rejection should be withdrawn.

Applicant respectfully traverses the rejection of claim 19 and requests reconsideration of this claim. Claim 19 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Takahashi and Felthauser. However, as discussed above, Ando does not disclose calculating a specific projection factor and *applying* the projection factor to sales data from the *current* sub-period of interest, as recited in claim 17 of the instant application from which cliam 19 depends. Neither Takahashi nor Felthauser cures the deficiencies of Ando. As such, Ando, alone or in combination with Takahashi and Felthauser, does not teach or suggest the subject matter of claim 19 and is not rendered obvious in light of the alleged combination and this rejection should be withdrawn.

Conclusion

Based on the foregoing, Applicants submit that the present application is now in condition for allowance. A Notice of Allowance is respectfully requested. Applicant requests a one-month extension of time. A check in the amount set forth in 37 C.F.R. § 1.17(a)(1) is enclosed. The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication to Deposit Account No. 02-4377.

Respectfully submitted,

BAKER BOTTS L.L.P.

By: _____

Paul A. Ragusa
Patent Office Reg. No. 38,587

Michael J. McNamara
Patent Office Reg. No. 52,017

30 Rockefeller Plaza
New York, NY 10012-4498

Attorneys for Applicants
212-408-2500

Enclosure